

BELL ATLANTIC
FCC TARIFF No. 1
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Collocated Interconnection Service Update

Description and Justification

The Bell Atlantic telephone companies¹ ("Bell Atlantic") submit tariff pages and support documentation to modify the existing virtual collocated interconnection service offering. The modifications include expansion of the design and planning fee rate element, expansion of the equipment installation and engineering charges to include installation *and* augmentations, clarification of the availability of options for delivering entrance facilities, combination of the cross-connect and connection service rate elements into one rate element, and the introduction of a Short-Term DS3 cross-connect option to interconnect with Bell Atlantic's Short-Term DS3 service offering.

¹ Bell Atlantic-Delaware, Inc., Bell Atlantic-Maryland, Inc., Bell Atlantic-New Jersey, Inc., Bell Atlantic-Pennsylvania, Inc., Bell Atlantic-Virginia, Inc., Bell Atlantic-Washington, D.C., Inc., and Bell Atlantic-West Virginia, Inc.

Description of Filing

This section provides details of the proposed modifications:

The current Design and Planning Fee recovers the expenses associated with the application processing, advance planning, and preparation of a design proposal for a collocation arrangement that will meet the collocator's requirements. This filing proposes to expand the existing rate element to specify separate fees for new arrangements with a single entrance, new arrangements with dual entrances, and for design changes made to existing arrangements.

The existing Installation and Engineering Fee and the proposed Site Augmentation Fee recover the costs associated with the installation and engineering or augmentation of collocator-designated equipment. These fees are assessed *only* to those collocators who choose to have Bell Atlantic perform the installation or augmentation work. The proposed breakdown of the existing Installation and Engineering Fee into equipment-specific rate elements will allow Bell Atlantic to recover the costs that are actually incurred. The introduction of the equipment-specific Site Augmentation Fees clarifies the charges that will be assessed when a collocator requests equipment-related work activities following initial installation.²

The proposed tariff language clarifies the options available to collocators for the manner in which the collocation cable is handed off to Bell Atlantic. Previously, the tariff specified only that the collocator was required to provide to Bell Atlantic sufficient cable at the central office manhole to reach the collocation arrangement. This filing clarifies that

² Collocator requests that do not fit any of the available categories will be charged on an individual case basis and filed in Section 19.7 of the tariff.

customers may alternatively request to have Bell Atlantic splice its own fire-retardant cable to the collocator's cable at the central office cable vault, or they can continue to provide sufficient cable to reach their collocated arrangement.

Bell Atlantic is proposing to combine the existing Cross Connect and Connection Service rate elements into one Cross Connect rate element. The separate rate elements were necessary when Bell Atlantic offered both virtual and physical collocation arrangements because the Cross Connect was the same for both services but the Connection Service differed. Since physical collocation service is no longer available, the need for separate rate elements no longer exists. The single rate element will be easier to administer for both Bell Atlantic and the collocator. The combined rate is based on the Commission-prescribed rates for the DS1 and DS3 Cross Connects and Connection Service and the currently-effective rates for DS0-level Cross Connects and Connection Service.

This filing also introduces a new option for collocation services -- a Short-Term DS3 Cross Connect that can be used to interconnect to Bell Atlantic's Short-Term DS3 service offering. Short-Term DS3 service, both cross connects and channel terminations, is used for trade shows, demonstrations, and other events which require one-time, short-term use of a DS3 service.

In addition, there are several miscellaneous modifications that are proposed in this filing, including the clarification of a minimum service period requirement for DS3 Cross

Connects, introduction of collocation-related labor charges in Section 19.5,³ and the submission of special construction charges for two collocators in Section 19.7.

Justification

This filing increases the service options available to collocators and is part of Bell Atlantic's ongoing effort to meet collocators' requests.

³ These charges are based on the labor rates contained in Section 13 which are applied to all Bell Atlantic services. The introduction of these rates in Section 19 allows Bell Atlantic to track usage for collocation services.

SECTION 2

COMPLIANCE WITH COMMISSION RULES

Section 61.49 specifies supporting information to be submitted with letters of transmittal for tariffs of price cap carriers. Sections 61.49 (a) through (f) are not applicable because this filing is for a new service. Section 61.49(g)(1) is applicable only to interexchange carriers.

Sections 61.49(g)(2) specifies the data required to support new service offerings that will later be included in a price cap basket. Section 61.49(h) requires that each filing for new services that will later be included in a basket include the following:

- Estimates of the effect of the new service on traffic and revenues, including traffic and revenues of other services.
- Supporting workpapers for estimates of costs, traffic, and revenues.

This material is detailed in Section 3, Costs, Rates, Demand, and Revenue, and Section 4, Workpapers.

SECTION 3

COSTS, RATES, DEMAND, and REVENUES

Cost Development

The Commission requires that the unit costs for collocated interconnection services be derived in a manner consistent with the standards adopted in the LEC price cap proceeding. This section details the costing methodology used for collocated interconnection services and demonstrates that the methodology is consistent with those standards.

The Design and Planning Fee covers the expenses associated with application processing, advance planning, and preparation of a design proposal that meets the collocator's specific requirements. These costs, which include the overall coordination of the project, engineering layout and design, and operations feasibility assessments, vary depending on the nature of the collocator's request. Therefore, Bell Atlantic has separately identified the activities required when a collocator requests a single or a dual entrance to the collocated equipment or when a collocator requests that existing collocated equipment be augmented. A site augmentation Design and Planning Fee will be assessed each time a collocator requests an activity that is included in the Site Augmentation Fees, with the exception of a software upgrade request.⁴ The up-front cost will be recovered on a one-time basis per unit of equipment. Refer to Workpaper 1.

⁴ These Design and Planning Fees will be assessed any time a collocator installs or augments an arrangement, regardless if Bell Atlantic is selected to perform the actual work functions, because Bell Atlantic will still expend the design and planning resources. These

The Equipment Installation and Engineering Fee is assessed only in those instances where a collocator chooses to have Bell Atlantic install the collocation equipment. Bell Atlantic based this fee on estimates provided by equipment vendors. This fee recovers the costs associated with the engineering of the equipment design configuration, actual installation of the collocation equipment, testing of the new equipment, and shipping and handling of the new equipment.⁵ If Bell Atlantic is not chosen to install and engineer the collocation equipment, no fee will be assessed. The fee recovers the up-front costs of engineering and installing one unit of equipment. Refer to Workpaper 2.

The Site Augmentation Fee is assessed to collocators who request Bell Atlantic to perform subsequent changes to an existing collocation arrangement. This fee is assessed only when Bell Atlantic is selected to perform the augmentation. Activities that qualify as a site augmentation include such things as the installation of additional equipment to an existing arrangement and the replacement of existing equipment with new equipment. The activities associated with a site augmentation (with the exception of multiplexer re-cabling and software upgrades) are the same as with the Installation and Engineering Fee, but in some cases the level of costs differs. The costs for re-cabling collocation multiplexers are incurred whenever a collocator requests a change in the configuration of a previously-cabled multiplexer, *e.g.*, a multiplexer that was previously cabled to provide three DS3 circuits is re-engineered to provide 84 DS1 circuits. The costs for software upgrade

fees will also be assessed if a collocator's equipment installation or augmentation request is treated on an individual case basis.

⁵ The vendor performs these activities and bills Bell Atlantic accordingly.

augmentations recover the labor expenses associated with a Bell Atlantic technician downloading new software into the collocation equipment. Refer to Workpaper 3.

The Cable Installation Fee is an up-front charge that will be assessed for each collocation entrance cable that is installed in a central office.⁶ The fee is a weighted average of the costs to pull the collocater-designated cable left in the manhole to the collocation arrangement and splice the collocated cable at the fiber distribution frame and the costs to splice Bell Atlantic fire-retardant cable to the collocater's cable at the central office cable vault and at the fiber distribution frame. Refer to Workpaper 4.

No cost support is required for the combination of the Cross Connect and Connection Service rate element into the single Cross Connect rate element because the new rate is based on the Commission-prescribed rates for DS1 and DS3 Cross Connects and Connection Service and the currently-effective rates for DS0-level Cross Connects and Connection Service. Refer to Workpaper 5.

The costs for Short-Term DS3 Cross Connects are developed in the same manner as the costs for standard Short-Term DS3 channel terminations and are based on the existing DS3 Cross Connect costs which are adjusted to reflect decreased utilization resulting from short-term, temporary service. A utilization factor of 67 percent was used to adjust DS3 Cross Connect costs to reflect short term use.⁷ Refer to Workpaper 6. The nonrecurring costs associated with activating a Short-Term DS3 service are the same for

⁶ A collocater that has a dual entrance arrangement will be charged two cable installation fees.

⁷ This utilization factor is the same as that used for standard Short-Term DS3 service at the serving wire center end. This is appropriate because the impact from decreased utilization will affect both standard access and collocation services in a similar manner.

both channel terminations and cross connects, therefore, the Short-Term DS3 Cross Connect will rate reference the existing nonrecurring charge for Short-Term DS3 channel terminations found in Section 7.5.9.

In addition, Bell Atlantic is submitting the costs for a special construction request for a dual entrance. In those central offices that do not have dual entrances, the collocator is responsible for recovering the costs of constructing an additional entrance for the collocation cable. The activities required to construct a new entrance are performed by a vendor and include drilling an opening into the cable vault and installing fire-proofed conduit. The dual entrance was requested by two collocators for the same central office, therefore, the costs will be shared equally by them. Refer to Workpaper 7.

Rate Development

The rates for the Design and Planning Fees, the Equipment Installation and Engineering Fees, the Site Augmentation Fees, the Cable Installation Fee, and the special construction charges are set at cost. Refer to Workpapers 1 - 4 and 7. The rate for the combined Cross Connect rate element is based on the Commission-prescribed rates for DS1 and DS3 Cross Connects and Connection Service and the currently-effective rates for DS0-level Cross Connects and Connection Service. Refer to Workpaper 5.

The rate for Short-Term DS3 Cross Connect service is calculated by multiplying the unit costs by the overhead loading carried by a comparable service, which in this case is Short-Term DS3 channel termination service. The comparable service overhead loading is calculated by dividing the cost of a Short-Term DS3 channel termination by the tariffed rate. This method of calculating the overhead loading for use with collocation services is

consistent with the Commission's overhead methodology set forth in the May 11, 1995 Report and Order.⁸ Refer to Workpaper 6

Demand and Revenue Forecast

The demand forecast is based on an evaluation of the requirements and growth trends of the current interconnection market. A demand forecast is provided for the proposed Design and Planning Fees, Equipment Installation and Engineering Fees, Site Augmentation Fees, Cable Installation Fee, and the Short-Term DS3 Cross Connect service. No demand forecast is required for the existing DS3, DS1, and DS0-level Cross Connects because the combination of the Cross Connect and Connection Service rate elements does not impact the demand for this services. The demand forecast is shown on Workpaper 8.

The projected revenues are calculated by multiplying the proposed rates mentioned above by the forecasted demand. The projected costs for those services are calculated in the same manner. Revenue and cost projections are shown on Workpaper 8. Cross-elastic impacts cannot be forecasted with any accuracy and are therefore not included in this filing.

⁸ *Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Virtual Collocation for Special Access and Switched Transport*, CC Docket No. 94-97, Phase I, Report and Order, FCC 95-200, 10 FCC Rcd 6375 (1995).

SECTION 4
WORKPAPERS

<u>Number</u>	<u>Description</u>
1	Design and Planning Fee, Cost and Rate Development
2	Equipment Installation and Engineering Fee, Cost and Rate Development
3	Site Augmentation Fee, Cost and Rate Development
4	Cable Installation Fee, Cost and Rate Development
5	Single Cross Connect Rate, Rate Development
6	Short-Term DS3 Cross Connect, Cost and Rate Development
7	Special Construction Charge, Cost and Rate Development
8	Demand, Revenue, and Cost Projections

**Collocated Interconnection Service
Design and Planning Fee - Cost and Rate Development**

Activity	Time	Labor Rate	Labor Expense
<u>SINGLE ENTRANCE</u>			
<i>Project Coordination</i>			
Local Collocation Coordinator	12	\$81.55	\$979
Collocation Product Manager	1	\$84.12	\$84
Collocation Administrative	2	\$75.51	\$151
<i>Engineering</i>	12	\$59.00	\$708
<i>Network Operations</i>	5	\$62.73	<u>\$314</u>
TOTAL Cost/Rate			\$2,235
<u>DUAL ENTRANCE</u>			
<i>Project Coordination</i>			
Local Collocation Coordinator	15	\$81.55	\$1,223
Collocation Product Manager	1	\$84.12	\$84
Collocation Administrative	2	\$75.51	\$151
<i>Engineering</i>	16	\$59.00	\$944
<i>Network Operations</i>	9	\$62.73	<u>\$565</u>
TOTAL Cost/Rate			\$2,967
<u>SITE AUGMENTATION</u>			
<i>Project Coordination</i>			
Local Collocation Coordinator	6	\$81.55	\$489
Collocation Product Manager	1	\$84.12	\$84
Collocation Administrative	1	\$75.51	\$76
<i>Engineering</i>	0	\$59.00	\$0
<i>Network Operations</i>	5	\$62.73	<u>\$314</u>
TOTAL Cost/Rate			\$963

Collocated Interconnection Service
Equipment Installation and Engineering Fee - Cost and Rate Development

OC3-Type Equipment Installation

Installation	\$2,963
Equipment Engineering	\$1,686
Equipment Testing	\$472
Shipping and Handling Charges	<u>\$77</u>
TOTAL Cost/Rate	\$5,198

OC12-Type Equipment Installation

Installation	\$3,390
Equipment Engineering	\$1,711
Equipment Testing	\$593
Shipping and Handling Charges	<u>\$59</u>
TOTAL Cost/Rate	\$5,753

OC48-Type Equipment Installation

Installation	\$7,163
Equipment Engineering	\$2,318
Equipment Testing	\$775
Shipping and Handling Charges	<u>\$78</u>
TOTAL Cost/Rate	\$10,334

D4 Channel Bank Installation

Installation	\$1,991
Equipment Engineering	\$1,398
Equipment Testing	\$275
Shipping and Handling Charges	<u>\$27</u>
TOTAL Cost/Rate	\$3,692

**Collocated Interconnection Service
Site Augmentation Fee - Cost and Rate Development**

OC3-Type Equipment Augmentation

Installation	\$2,696
Equipment Engineering	\$1,574
Equipment Testing	\$502
Shipping and Handling Charges	<u>\$41</u>
TOTAL Cost/Rate	\$4,813

OC12-Type Equipment Augmentation

Installation	\$3,123
Equipment Engineering	\$1,599
Equipment Testing	\$593
Shipping and Handling Charges	<u>\$23</u>
TOTAL Cost/Rate	\$5,339

OC48-Type Equipment Augmentation

Installation	\$7,163
Equipment Engineering	\$2,318
Equipment Testing	\$775
Shipping and Handling Charges	<u>\$78</u>
TOTAL Cost/Rate	\$10,334

D4 Channel Bank Augmentation

Installation	\$1,991
Equipment Engineering	\$1,398
Equipment Testing	\$275
Shipping and Handling Charges	<u>\$27</u>
TOTAL Cost/Rate	\$3,692

Multiplexing Equipment Re-Cabling

Cable Re-engineering	\$1,519
Equipment Engineering	\$704
Equipment Testing	\$319
Shipping and Handling Charges	<u>\$2</u>
TOTAL Cost/Rate	\$2,545

Software Upgrade

Labor Expense	<u>\$93</u>
TOTAL Cost/Rate	\$93

**Collocated Interconnection Service
Cable Installation Fee - Cost and Rate Development**

Cable Pull

1. Time Required for Cable Pull, hours		10
2. Technician Labor Rates, per hour		<u>\$60.40</u>
3. Cable Pull Expense	$L1 * L2$	\$604.00

Cable Splice

4. Time Required for Cable Splice, hours		7.5
5. Technician Labor Rate, per hour		<u>\$60.40</u>
6. Cable Splice Expense	$L4 * L5$	\$453.00
7. Total Cable Installation Expense / Rate	$L3 + L6$	\$1,057.00

**Collocated Interconnection Service
Single Cross-Connect Rate**

Service	Current Rate Cross Connect (A)	Current Rate Connect. Svc. (B)	Proposed Rate Cross Connect (C=A+B)
<i>DS3</i>	\$28.84	\$178.40	\$207.24
<i>DS1</i>	\$2.07	\$20.47	\$22.54
<i>DS0-Level</i>			
- Telegraph, 2 wire	\$0.22	\$3.78	\$4.00
- Telegraph, 4 wire	\$0.54	\$4.58	\$5.12
- Voice Grade, 2 wire	\$0.24	\$4.02	\$4.26
- Voice Grade, 4 wire	\$0.65	\$5.50	\$6.15
- DDS, 2.4 kbps	\$0.90	\$7.60	\$8.50
- DDS, 4.8 kbps	\$1.02	\$8.61	\$9.63
- DDS, 9.6 kbps	\$1.14	\$9.63	\$10.77
- DDS, 19.2 kbps	\$1.26	\$10.64	\$11.90
- DDS, 56.0 kbps	\$1.38	\$11.65	\$13.03
- DDS, 64.0 kbps	\$1.50	\$12.66	\$14.16

NOTE: These rates apply to both Special Access and Switched Transport

Collocated Interconnection Service
Short-Term DS3 Cross Connect - Cost and Rate Development

Cost Development

		DS3 Cross-Connect	DS3 Connection Svc	DS3 Cross Connect
1. Investment		\$970.63	\$22,909.19	\$23,879.82
2. Depreciation		\$93.61	\$57.31	\$150.92
3. Cost of Money		\$87.45	\$230.63	\$318.08
4. Income Tax		\$38.70	\$105.42	\$144.12
5. Maintenance		\$25.57	\$631.66	\$657.23
6. Administration		\$29.12	\$686.05	\$715.17
7. Other Tax		\$5.19	\$18.79	\$23.98
8. Annual Cost	L2 + ... L7	\$279.64	\$1,729.86	\$2,009.50
9. Monthly Cost	L8 / 12	\$23.30	\$144.16	\$167.46
10. Short-Term Utilization Factor		See Transmittal No. 735		67%
11. Short-Term Cost		L9 / L10		\$249.94

Comparable Services Overhead Development

12. Short-Term DS3 Channel Termination Rate		\$3,500
13. Short-Term DS3 Channel Termination Cost	See Transmittal No. 735*	\$2,228
1. Short-Term DS3 Channel Termination Overhead	L12 / L13	1.57

Rate Development

15. Short-Term Cross Connect Cost	L11	\$249.94
16. Comparable Services Overhead	L14	1.57
17. Short-Term Cross Connect Rate	L15 * L16	\$392.63

Ratios

19. Annual Cost to Investment	(L11*12) / L1	0.13
20. Monthly Cost to Monthly Rate	L11 / L17	0.64

* Short-Term DS3 channel termination costs reflects updated standard DS3 costs

Collocated Interconnection Service
Special Construction Charge - Cost and Rate Development

LABOR: Drill Opening and Install Conduit		\$5,592.30
MATERIAL: Conduit, Conduit Covers, and Connectors		<u>\$2,350.00</u>
TOTAL COST/RATE		\$7,942.30
COST/RATE per requesting collocater	<i>Total / 2</i>	\$3,971.15

**Collocated Interconnection Service
Demand, Revenue, and Cost Projections**

	Demand	Cost	Rate	Annual Costs	Annual Revenues
<u>Design and Planning Fee</u>					
Single Entrance, per occurrence	9	\$2,235.00	\$2,235.00	\$20,115	\$20,115
Dual Entrance, per occurrence	1	\$2,967.00	\$2,967.00	\$2,967	\$2,967
Site Augmentation, per occurrence	10	\$963.00	\$963.00	\$9,630	\$9,630
<u>Equipment Installation and Engineering Fee</u>					
OC3-Type Equipment, per occurrence	3	\$5,198.00	\$5,198.00	\$15,594	\$15,594
OC12-Type Equipment, per occurrence	2	\$5,753.00	\$5,753.00	\$11,506	\$11,506
OC48-Type Equipment, per occurrence	5	\$10,334.00	\$10,334.00	\$51,670	\$51,670
D4 Channel Bank, per occurrence	0	\$3,692.00	\$3,692.00	\$0	\$0
<u>Site Augmentation Fee</u>					
OC3-Type Equipment, per occurrence	2	\$4,813.00	\$4,813.00	\$9,626	\$9,626
OC12-Type Equipment, per occurrence	3	\$5,339.00	\$5,339.00	\$16,017	\$16,017
OC48-Type Equipment, per occurrence	4	\$10,334.00	\$10,334.00	\$41,336	\$41,336
D4 Channel Bank, per occurrence	0	\$3,692.00	\$3,692.00	\$0	\$0
Multiplexer Re-cabling, per occurrence	1	\$2,545.00	\$2,545.00	\$2,545	\$2,545
Software Upgrade, per occurrence	2	\$93.00	\$93.00	\$186	\$186
Cable Installation Fee	10	\$1,057.00	\$1,057.00	\$10,570	\$10,570
Short-Term DS3 Cross Connect	11	\$249.94	\$360.00	\$2,749	\$3,960